

Fast Separation of IgM AND IgG Antibodies by Size-Exclusion Chromatography

Application

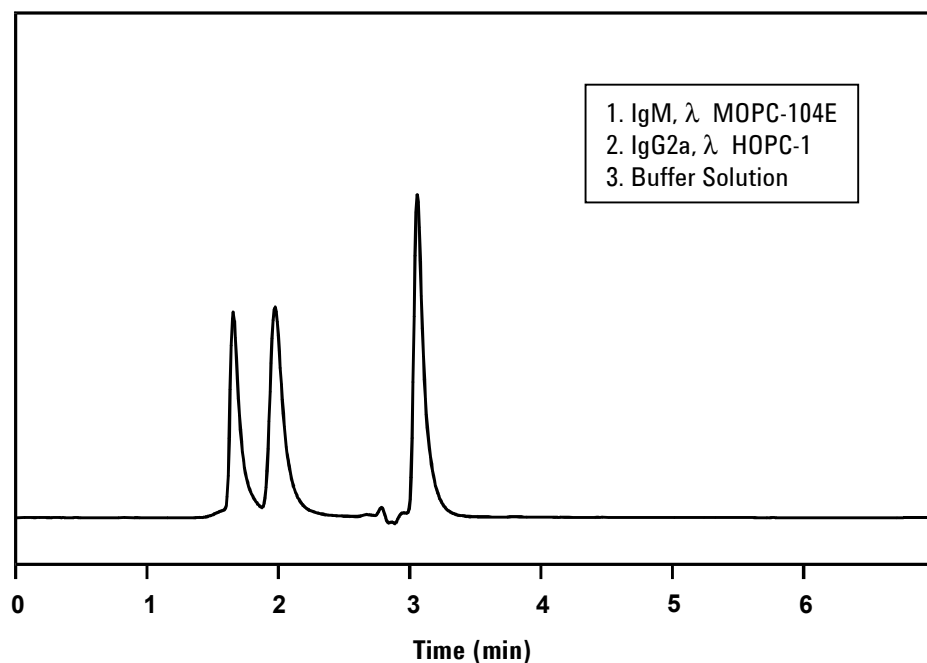
Biochemical

Robert Ricker

Antibodies play a critical role in modern biotechnical research. The high specificity and affinity of antibodies for the analyte make them useful for molecular targeting, detection, and immunoassays. Use of antibodies often includes separation of small amounts of conjugated and non-conjugated forms, purification from reactants, and exchange of buffer components. As a result of the differences in molecular size of the components, size-exclusion chromatography is a powerful tool, well-adapted to these separations.

Highlights

- Unlike polymer-based or soft-silica packing materials, ZORBAX particles are extremely rugged even under high back-pressures. This characteristic allows higher flow rates and shorter run times (<4 min) for high-throughput experimentation.
- Injection volume of a antibody sample can be reduced (1-10 μL) without loss of sensitivity, when using smaller-diameter columns (4.6 mm).



Conditions:

ZORBAX GF-250 (4.6 x 250 mm) (Agilent P/N: 884973-701)

Mobile Phase: 200 mM Sodium Phosphate (pH 7), 0.01% Azide

Injection: 2.5 μL (1 mg/mL), 0.94 mL/min, Ambient, Detect. UV (230 nm)



Agilent Technologies

*Robert Ricker is an application chemist
based at Agilent Technologies, Wilmington,
Delaware.*

For more information on our products and
services, visit our website at:
www.agilent.com/chem

Copyright© 2002 Agilent Technologies, Inc.
All Rights Reserved. Reproduction,
adaptation or translation without prior
written permission is prohibited, except as
allowed under the copyright laws.

Agilent shall not be liable for errors
contained herein or for incidental or
consequential damages in connection with
the furnishing, performance, or use of this
material.

Information, descriptions, and specifications
in this publication are subject to change
without notice.

Printed in the USA
April 25, 2002
5988-6321EN



Agilent Technologies